

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

---

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product code :

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Manufacture of plastics products, including compounding and  
stance/Mixture conversion

### 1.3 Details of the supplier of the safety data sheet

Company : KRAIBURG TPE GmbH & Co. KG  
Friedrich-Schmidt-Str. 2  
84478 Waldkraiburg

Telephone : +49863898100

Telefax : +4986389810310

E-mail address of person : regulatory@kraiburg-tpe.com  
responsible for the SDS

### 1.4 Emergency telephone number

+49 (8638) 9810 0 (Only available at office times)

---

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Skin irritation , Category 2	H315: Causes skin irritation.
Eye irritation , Category 2	H319: Causes serious eye irritation.
Skin sensitisation , Category 1	H317: May cause an allergic skin reaction.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

Precautionary statements : **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

**Hazardous components which must be listed on the label:**

Reaction product of piperazine and melamine pyrophosphate  
maleic anhydride

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

**Components**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Reaction product of piperazine and melamine pyrophosphate	195250-08-9	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317	>= 20 - < 30
maleic anhydride	108-31-6 203-571-6 607-096-00-9	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 STOT RE 1; H372	< 0,001

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

- |                         |   |   |
|-------------------------|---|---|
| If inhaled              | : | If unconscious, place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.   |
| In case of skin contact | : | If skin irritation persists, call a physician.<br>If on skin, rinse well with water.<br>If on clothes, remove clothes.  |
| In case of eye contact  | : | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist. |
| If swallowed            | : | Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.               |

## 4.2 Most important symptoms and effects, both acute and delayed

- |       |   |   |
|-------|---|---|
| Risks | : | Causes skin irritation.<br>May cause an allergic skin reaction.<br>Causes serious eye irritation. |
|-------|---|---|

## 4.3 Indication of any immediate medical attention and special treatment needed

- |           |   |                        |
|-----------|---|------------------------|
| Treatment | : | Treat symptomatically. |
|-----------|---|------------------------|

---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- |                                |   |                       |
|--------------------------------|---|-----------------------|
| Unsuitable extinguishing media | : | High volume water jet |
|--------------------------------|---|-----------------------|

### 5.2 Special hazards arising from the substance or mixture

### 5.3 Advice for firefighters

- |   |   |   |
|---|---|---|
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.  |
| Further information                           | : | Standard procedure for chemical fires.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

---

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- |                      |   |                                    |
|----------------------|---|------------------------------------|
| Personal precautions | : | Use personal protective equipment. |
|----------------------|---|------------------------------------|

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

---

Avoid dust formation.  
Avoid breathing dust.

## 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

---

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : When using do not eat or drink. When using do not smoke.  
Wash hands before breaks and at the end of workday.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Storage class (TRGS 510) : 11, Combustible Solids

Further information on storage stability : No decomposition if stored and applied as directed.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

## 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
maleic anhydride	108-31-6	AGW (Vapour and aerosols)	0,02 ppm 0,081 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category): 1; =2.5=(I)				
Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin and respiratory system				

### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles  
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : solid  
Density : 1,1 g/cm3

### 9.2 Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

## 10.4 Conditions to avoid

Conditions to avoid : No data available

## 10.5 Incompatible materials

Materials to avoid : Not applicable

## 10.6 Hazardous decomposition products

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute toxicity

Not classified based on available information.

### Components:

#### Reaction product of piperazine and melamine pyrophosphate:

Acute oral toxicity : Acute toxicity estimate: > 5.000 mg/kg  
Remarks: The value is calculated

Acute dermal toxicity : Acute toxicity estimate: > 5.000 mg/kg  
Remarks: The value is calculated

#### maleic anhydride:

Acute oral toxicity : LD50 (Rat, male and female): 1.090 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit, female): 2.620 mg/kg  
GLP: No information available.

### Skin corrosion/irritation

Causes skin irritation.

### Product:

Remarks : May cause skin irritation and/or dermatitis.

### Components:

#### Reaction product of piperazine and melamine pyrophosphate:

Result : Skin irritation

#### maleic anhydride:

Species : Rabbit  
Method : No information available.  
Result : Corrosive to skin  
GLP : no

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

---

## Serious eye damage/eye irritation

Causes serious eye irritation.

### Product:

Remarks : May cause irreversible eye damage.

### Components:

#### Reaction product of piperazine and melamine pyrophosphate:

Result : Eye irritation

#### maleic anhydride:

Species : Rabbit  
Result : Corrosive to eyes  
GLP : yes

## Respiratory or skin sensitisation

### Skin sensitisation

May cause an allergic skin reaction.

### Respiratory sensitisation

Not classified based on available information.

### Product:

Remarks : Causes sensitisation.

### Components:

#### Reaction product of piperazine and melamine pyrophosphate:

Result : May cause sensitisation by skin contact.

#### maleic anhydride:

Test Type : Buehler Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Assessment : May cause sensitisation by skin contact.  
Method : OECD Test Guideline 406  
Result : positive  
GLP : yes

Exposure routes : Inhalation  
Species : Rat  
Assessment : Probability of respiratory sensitisation in humans based on animal testing  
Result : positive

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

## Germ cell mutagenicity

Not classified based on available information.

## Carcinogenicity

Not classified based on available information.

## Reproductive toxicity

Not classified based on available information.

## STOT - single exposure

Not classified based on available information.

## STOT - repeated exposure

Not classified based on available information.

## Aspiration toxicity

Not classified based on available information.

## Further information

### Product:

Remarks : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### maleic anhydride:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 75 mg/l  
Exposure time: 96 h  
Test Type: static test  
GLP: no

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 42,81 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202  
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 74,35 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 10 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
GLP: no



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

---

## 12.2 Persistence and degradability

### Components:

#### maleic anhydride:

Biodegradability : Result: Readily biodegradable.  
Method: OECD Test Guideline 301B  
GLP: yes

## 12.3 Bioaccumulative potential

### Components:

#### maleic anhydride:

Partition coefficient: n-octanol/water : log Pow: -2,61 (19,8 °C)  
pH: 4 - 9  
Method: OECD Test Guideline 107  
GLP: yes

## 12.4 Mobility in soil

### Components:

#### maleic anhydride:

Distribution among environmental compartments : Koc: 42, log Koc: 1,63

## 12.5 Results of PBT and vPvB assessment

### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

## 12.6 Other adverse effects

### Product:

Additional ecological information : No data available

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

Do not re-use empty containers.

## SECTION 14: Transport information

### 14.1 UN number

### 14.2 UN proper shipping name

### 14.3 Transport hazard class(es)

### 14.4 Packing group

### 14.5 Environmental hazards

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	: Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	: Not applicable

#### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### 15.2 Chemical safety assessment

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

## SECTION 16: Other information

### Full text of H-Statements

H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H334	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	: Causes damage to organs through prolonged or repeated exposure if inhaled.

### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation
Resp. Sens.	: Respiratory sensitisation
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
DE TRGS 900 / AGW	: Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	09.07.2021	100000002872	Date of first issue: 09.07.2021

---

1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

## Further information

### Classification of the mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317

### Classification procedure:

Calculation method
Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN